

IMPROVED SYSTEM FOR INDIVIDUAL AND  
REMOTE CONTROL OF SPACED LIGHTING FIXTURES

5     ABSTRACT OF THE DISCLOSURE

          A plurality of spaced ceiling mounted fixtures  
or other controllable electrical appliances have  
radiation detectors mounted within each fixture and wired  
internally of the fixture to a dimming circuit or to a  
10     ballast. The radiation detectors have sensitivity over a  
wide angle and have elongated plastic radiation  
conduction rods which extend to or beyond the plane of  
the lens of the fixture to be located free of shadow  
effects of reflections of the fixture lens. A flexible  
15     end light fiber optics can be used in place of the  
acrylic rods. A narrow beam radiation transmitter  
selectively illuminates one of the rods or end light  
fiber optics without illuminating the others. The  
dimming circuits or ballasts within the fixtures can be  
20     further controlled by external dimmers, occupancy  
sensors, timeclocks, photosensors and other types of  
input devices. The radiation detector and ballast can  
occupy a common housing and share the same power supply  
and circuit board. The microcontroller for the radiation  
25     detector operates with a 4 of 4 voting mode until a valid  
signal is detected to switch the system to a 3 of 4  
voting mode. A novel mounting adaptor for mounting a  
visible light fiber optic cable is disclosed with the  
visible light fiber optic cable conducting infrared  
30     radiation for up to 24 inches.